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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------------------|-------------|----------------------|---------------------|------------------|
| 10/725,649 | 12/02/2003 | Wenguang Ma | ALCN-101US3 | 4523 |
| 23122 | 7590 | 12/16/2005 | EXAMINER | |
| RATNERPRESTIA | | | VO, HAI | |
| P O BOX 980 | | | ART UNIT | |
| VALLEY FORGE, PA 19482-0980 | | | PAPER NUMBER | |
| | | | 1771 | |

DATE MAILED: 12/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|----------------------------------|--|
| Office Action Summary | Application No. 10/725,649 | Applicant(s) MA ET AL. | |
| | Examiner Hai Vo | Art Unit 1771 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>1018</u> . | 6) <input type="checkbox"/> Other: _____ |

1. All of the art rejections are maintained.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 5, 6 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Tusim et al (US 6,213,540) substantially as set forth in the 04/14/2005 Office Action.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tusim et al (US 6,213,540) as applied to claim 1 above, further in view of Crane et al (US 5,833,782) substantially as set forth in the 04/14/2005 Office Action.
6. Claim 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tusim et al (US 6,213,540) as applied to claim 1 above, further in view of Park et al (US 5,475,037) substantially as set forth in the 04/14/2005 Office Action.
7. Claims 1-5, 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mason et al (US 6,197,233) in view of Grinshpun et al (US 6,844,055) as

Art Unit: 1771

evidenced by Chen et al (US 6,165,308) substantially as set forth in the 04/14/2005 Office Action.

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mason et al (US 6,197,233) in view of Grinshpun et al (US 6,844,055) as evidenced by Chen et al (US 6,165,308) as applied to claim 1, further in view of Tusim et al (US 6,213,540) substantially as set forth in the 04/14/2005 Office Action.

Response to Arguments

9. The art rejections based on Tusim taken individually or collectively have been maintained for the following reasons. Applicants argue that Tusim teaches away from a material having no inter-strand voids in favor of foams manufactured to specifically have voids. The examiner disagrees. Applicants' attention is directed to column 7, lines 34-39. Tusim is one who first recognized the use of a die having a multiplicity of orifices which is designed to produce the foam strands bound to one another without the voids between the foam strands. Tusim has modified such a die to produce the foam strands having designed voids suitable for use in energy absorbing applications. Likewise, the composite with the recited structure as presently claimed have been apparently invented by Tusim and therefore, it is the examiner's position that Tusim anticipates the claimed subject matter.
10. The art rejections over Mason in view of Grinshpun and Chen have been maintained for the following reasons. Applicants argue that there is no motivation to combine Mason with Grinshpun because no mention of polyester is made in

Art Unit: 1771

Mason and Grinshpun mentions that styrene compounds are suitable alternative compounds for use in forming the foam strands. The arguments are not found persuasive for patentability. If Mason discloses the use of polyester, the art rejections will be made under the 102 rejections instead. Grinshpun discloses that the foam strands can be made from different polymeric compositions such as the combination of polyester and polystyrene (column 9, lines 60-67, column 10, lines 58-65 and claim 1). The teachings of Grinshpun give those skilled in the art the tools to conclude that the foam strands can be made from different polymeric compositions including the combination of polyester and polystyrene. The use of polyester in combination of polystyrene is possible and acceptable in forming the foam strands and Grinshpun provides necessary details to practice the invention of Mason. That is a motivation to combine the two references.

Conclusion

11. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will

Art Unit: 1771

the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Vo whose telephone number is (571) 272-1485. The examiner can normally be reached on Monday through Friday, from 6:00 to 2:30,.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



HV

**HAIVO
PRIMARY EXAMINER**